

REMARKS

Reconsideration of this application as amended is respectfully requested.

In the Office Action, claims 1-24 were pending and rejected. In this response, no claim has been canceled. Claims 1-8, 12-15, 18, and 21 have been amended. No new matter has been added.

Claims 13-14 were objected because of informalities. In view of the foregoing amendments, it is respectfully submitted that the objection has been overcome.

Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. published application No. 2002/0163920 of Walker et al. ("Walker") in view of U.S. Patent No. 6,633,571 of Sakamoto et al. ("Sakamoto"). Applicant hereby reserves the right to swear behind Walker and Sakamoto.

In view of the foregoing amendments, it is respectfully submitted that claims 1-24 include limitations that are not disclosed by Walker and Sakamoto, individually or in combination. Specifically, independent claim 1 as amended recites as follows:

1. A computer implemented method comprising:
in response to a request for establishing a generic routing encapsulation (GRE) tunnel received at a first network element, the first network element determining a set of endpoints for the requested GRE tunnel based on the request;
determining a key, the key corresponding to a virtual private network (VPN);
dynamically establishing the GRE tunnel with the set of endpoints and the key between the first network element and a second network element, the second network element being identified by the set of endpoints; and
processing a set of GRE traffic for the VPN within the established GRE tunnel between the first and second network elements over a network provided by a network provider.

(Emphasis added)

Independent claim 1 includes limitations that a first network element determines a set of endpoints and a key in response to a request for a GRE tunnel, where the set of endpoints identifies a second network element. The first network element dynamically establishes a GRE VPN with the second network element based on the set of endpoints and the key. It is respectfully submitted that the above limitations are absent from Walker and Sakamoto.

In the Office Action, the Examiner contended that paragraphs [0012]-[0013] and [0029] of Walker read on the limitation set forth above (see 4/6/2005 Office Action, page 3). Applicant respectfully disagrees. Although Walker discloses authentication of a source for a VPN, the cited section of Walker fails to disclose the dynamic provisioning of a GRE VPN (e.g., a VPN within a GRE tunnel) as set forth above.

In contrast, independent claim 1 is not related to whether to authenticate a source of a VPN. Rather, independent claim 1 is related to how to dynamically provision a GRE VPN. Specifically, based on a GRE ID received from a request, a first network element dynamically determines a set of endpoints and a key to identify a second network element as a termination point of the GRE tunnel and establishes the GRE tunnel thereafter. It is respectfully submitted that the above limitations are absent from Walker.

Similarly, although Sakamoto discloses VPN compose method, it fails to disclose or suggest the limitations set forth above, particularly, the ways to dynamic provision a GRE VPN.

There is no suggestion within Walker and Sakamoto to combine with each other. Even if they were combined, such a combination still lacks the limitations set forth above. Therefore, for the reasons discussed above, it is respectfully submitted that independent claim 1 is patentable over Walker in view of Sakamoto.